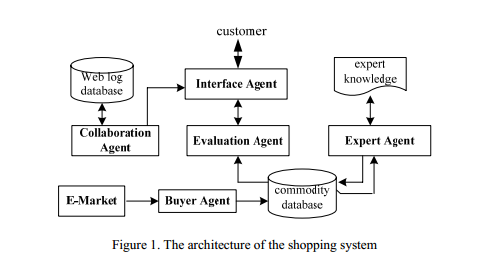
**AI Multi Agent Shopping System**

First, the system can acquire the customer’s current needs from

system-customer interactions. Then the system integrates built-in expert knowledge and the customer’s current needs, and recommends optimal products based on multi-attribute decision method. In order to maintain a semantic conversation with sellers, the commodity ontology is also utilized to support sharable information format and representation.

An AI multiagent shopping system where system is fed with various product details. The system allows user to register and enter his details about a particular product. The system records all the details provided by user and checks for various items matching his search. The system comes up with a list of items best suited for user needs. The system also suggests other related items that the user may like. The system suggests these items which are likely to be bought by the user based on his previous requirements. The system handles multiple users at a time and provides accurate results.



**Modules:**

* **User Registration:** User can register on the system and get his online account on site.
* **User Login:** User can login to system and check various furniture data online.
* **Multi Agent Support:** The multi agent guides and supports user through his entire shopping experience and sorts out products as per user preference.
* **Product Categories:** The electronic products are arranged and can be viewed in categories.
* **Add to cart:** Users can add products to cart.
* **Custom Search:** User may do a custom search. System takes user requirements and show products matching it.
* **Related products**: System also shows related products likely to bought by user.
* **User Decision Consideration:** The agent gets products as per user preference but leaves the final decision up to the user before making any payments.
* **Credit card payment:** After total bill is calculated user can pay via credit card online.

**Requirements:**

**Software Requirements:**

* Windows Xp, Windows 7(ultimate, enterprise)
* Sql 2008
* Visual studio 2010

**Hardware Components:**

* Processor – i3
* Hard Disk – 5 GB
* Memory – 1GB RAM

**Literature Survey:**

**What is Ecommerce ?**

Transacting or facilitating business on the Internet is called ecommerce. Ecommerce is short for "electronic commerce."  
  
Popular examples of ecommerce revolve around buying and selling online. But the ecommerce universe contains other types of activities as well. Any form of business transaction conducted electronically is ecommerce.  
  
**Examples of Ecommerce**

* **Online Shopping**  
  Buying and selling goods on the Internet is one of the most popular examples of ecommerce. Sellers create storefronts that are the online equivalents of retail outlets. Buyers browse and purchase products with mouse clicks. Though Amazon.com is not the pioneer of online shopping, it is arguably the most famous online shopping destination.
* **Electronic Payments**  
  When you are buying goods online, there needs to be a mechanism to pay online too. That is where payment processors and payment gateways come into the picture.  
    
  Electronic payments reduce the inefficiency associated with writing and mailing checks. It also does away with many of the safety issues that arise due to payment made in currency notes.
* **Online Auctions**  
  When you think online auction, you think eBay. Physical auctions predate online auctions, but the Internet made auctions accessible to a large number of buyers and sellers. Online auctions are an efficient mechanism for price discovery. Many buyers find the auction shopping mechanism much interesting than regular storefront shopping.
* **Internet Banking**  
  Today it is possible for you to perform the entire gamut of banking operations without visiting a physical bank branch. Interfacing of websites with bank accounts, and by extension credit cards, was the biggest driver of ecommerce.
* **Online Ticketing**  
  Air tickets, movie tickets, train tickets, play tickets, tickets to sporting events, and just about any kind of tickets can be booked online. Online ticketing does away with the need to queue up at ticket counters.

**Types of Ecommerce**

Ecommerce can be classified based on the type of participants in the transaction:

* **Business to Business (B2B)**  
  B2B ecommerce transactions are those where both the transacting parties are businesses, e.g., manufacturers, traders, retailers and the like.
* **Business to Consumer (B2C)**  
  When businesses sell electronically to end-consumers, it is called B2C ecommerce.
* **Consumer to Consumer (C2C)**  
  Some of the earliest transactions in the global economic system involved barter -- a type of C2C transaction. But C2C transactions were virtually non-existent in recent times until the advent of ecommerce. Auction sites are a good example of C2C ecommerce.

**How To Increase Ecommerce Conversion**

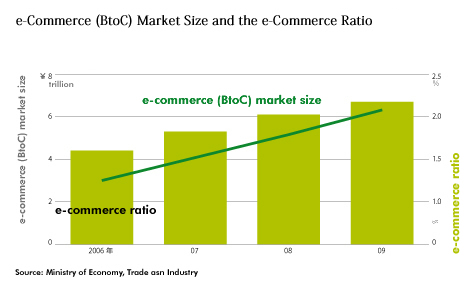
Amidst the din of online marketing, it can be difficult to attract customers to your website. Consequently, it is nothing short of a tragedy when a prospect goes through most of the purchase cycle, but stops short of completion. Such incomplete transactions are a thorn in the side of ecommerce.  
  
When a customer discontinues the checkout process midway, it's called "shopping cart abandonment." The higher the incidence of shopping cart abandonment, the lower the shopping cart conversion rate. You can improve your conversion rate in seven easy steps:

* **Do Not Force Customers to Register**  
  You may be tempted to capture as much customer data as possible. However, many prospects would prefer to abandon you, rather than fill up a long registration form.  
    
  Allow customers to buy without registering. If that is not an option, keep the registration form as simple as possible. Only ask for information that you really need. Make the form less intimidating by hiding the parts of the form that are not required at that point of time.
* **Remove Generic Navigation During Checkout**  
  To engage customers, [ecommerce websites](http://ecommerce.about.com/od/Ecommerce-Website-Design/a/Ecommerce-Website.htm) like to provide them with many [navigation options](http://graphicdesign.about.com/od/effectivewebsites/tp/website_nav_types.htm) -- top menu, sidebars, footer links, search box, and more. Once the customer initiates checkout, it is best to eliminate generic navigation, and only retain links that process the transaction. This will lower the risk of distraction.
* **Build Customer Confidence in the Purchase Process**  
  If you are an iconic brand such as Amazon.com, customers may not think twice about paying on your site. For the rest of us, it can be a challenge to inspire customers to pay online. Here are three simple measures to boost customer confidence:  
    
  + **Display a Summary of the Customer's Purchase**  
    Many customers multi-task online. They could easily forget what they have already added to their shopping cart. At the top right corner, display a summary of the purchase at all times. This will make customers feel that they are in control of the purchase process.
  + **Display a Progress Indicator**  
    A progress indicator can reassure customers that each step in the purchase process is taking them closer to completion.
  + **Disclose Supplementary Costs Upfront**  
    Supplementary costs include: shipping, packing, taxes, and the like. Put yourself in the shoes of a customer who chooses goods worth $35, but is eventually asked to pay $47. Wouldn't you feel cheated and abandon the shopping cart?
* **Have a Well-Planned Coupon Strategy**  
  Many online shoppers are bargain hunters. Discount coupons provide them instant gratification. These shoppers might abandon their shopping cart while they look for a coupon. If you accept coupons, make it easy for customers to find a coupon.
* **Direct the Customer's Actions**  
  Here are three simple strategies that can positively influence your customer's actions:  
    
  + **Have a "Checkout Now" Button**  
    While some customers may want to browse around, others may be ready to pay right away. If a customer is ready to pay, it is a cardinal sin in the business of ecommerce to delay the collection of that payment.
  + **Have the Most Important Action Button Above the Fold**  
    The most important action button could be the checkout now button. It could also be a "buy now" button, if the customer has not added goods to the shopping cart. Make sure that the button is prominently located [above the fold](http://advertising.about.com/od/advertisingglossary/g/abovethefold.htm).
  + **Reduce the Number of Clicks to Check Out**  
    Design a single-screen checkout form. If that is not feasible, reduce the number of clicks required to check out. The more the number of clicks you thrust upon a customer, the higher the likelihood of shopping cart abandonment.
* **Up-Sell After the Sale**  
  The temptation to sell more to a customer is understandable. However, persistent up-selling heightens the risk of losing a customer. It is best to close the sale at hand and up-sell later.
* **Recover the Abandoned Cart**  
  Despite your best attempts, some customers will abandon the shopping cart. That is not the end of the world. Immediately upon cart abandonment, you can email the customer and encourage her to complete the purchase. If the customer is not registered, you can store the shopping cart information in [cookies](http://webdesign.about.com/cs/cookies/a/aa082498a.htm) on the customer's computer. The next time she visits your site, you can prompt her to complete the sale.

**Final Words**  
You will notice a consistent theme in the steps listed above: encourage rapid checkout. However, any changes you make to your website should be set in stone only after rigorous testing.

**Market Survey:**

India's e-commerce market grew at a staggering 88% in 2013 to $16 billion, riding on booming online retail trends and defying slower economic growth and spiralling inflation, according to a survey by industry body Assocham.   
  
"The increasing internet penetration and availability of more payment options boosted the e-commerce industry in 2013," Assocham secretary general DS Rawat said.   
  
"Besides electronics gadgets, apparel and jewellery, home and kitchen appliances, lifestyle accessories like watches, books, beauty products and perfumes, baby products witnessed significant upward movement in last one year," Rawat said.

According to the survey, India's e-commerce market, which stood at $2.5 billion in 2009, reached $8.5 billion in 2012 and rose 88% to touch $16 billion in 2013. The survey estimates the country's e-commerce market to reach $56 billion by 2023, driven by rising online retail.   
  
As per responses by 3,500 traders and organised retailers in Delhi, Mumbai, Chennai, Bangalore, Ahmedabad and Kolkata who participated in the survey, online shopping grew at a rapid pace in 2013 due to aggressive online discounts, rising fuel prices and availability of abundant online options.   
  
Among the cities, Mumbai topped the list of online shoppers followed by Delhi, while Kolkata ranked third, the survey found.   
  
The age-wise analysis revealed that 35% of online shoppers are aged between 18 years and 25 years, 55% between 26 years and 35 years, 8% in the age group of 36-45 years, while only 2% are in the age group of 45-60 years. Besides, 65% of online shoppers are male while 35% are female.   
****

To make the most of increasing online shopping trends, more companies are collaborating with daily deal and discount sites, the survey pointed out.   
  
The products that are sold most are in the tech and fashion category, including mobile phones, iPads, accessories, MP3 players, digital cameras and jewellery, among others, it found.   
  
India has Internet base of around 150 million as of August, 2013, the survey said.   
  
"Having close to 10% of internet penetration in India throws a very big opportunity for online retailers to grow and expand as future of internet seems very bright," Rawat said.   
  
Those who are reluctant to shop online cited reasons like preference to research products and services online (30%), finding delivery costs too high (20%), fear of sharing personal financial information online (25%) and lack of trust on whether products would be delivered in good condition (15%), while 10% do not have a credit or debit card.